

平成 28 年第 1 回数学検査 MM 校 1 年 問題内容及び正答率

単元名	問題番号	問題内容	出題範囲			県全体	D3	D1+D2	C	A+B
			小学	中学	高校					
基本問題 (必答)	1-1	四則演算	●			93.2%	80.8%	94.0%	96.2%	98.5%
	1-2	四則演算		●		63.6%	34.5%	55.7%	77.6%	82.4%
	1-3	四則演算(小数)	●			64.4%	36.4%	60.0%	73.1%	86.8%
	1-4	四則演算(分数)	●			90.1%	63.8%	91.2%	98.4%	98.5%
	1-5	四則演算(分数)	●			85.6%	60.3%	84.3%	94.2%	97.1%
	1-6	四則演算(分数)		●		87.1%	58.8%	86.2%	96.7%	99.0%
	1-7	四則演算(平方根)		●		88.8%	59.8%	90.6%	96.7%	99.3%
	1-8	因数分解		●		83.5%	45.0%	83.2%	95.9%	99.3%
	1-9	1次方程式		●		87.0%	55.4%	87.6%	96.5%	99.5%
	1-10	2次方程式(因数分解)		●		56.7%	17.1%	42.6%	75.0%	91.9%
	1-11	2次方程式(解の公式)		●		65.6%	26.2%	55.5%	82.3%	94.9%
	1-12	濃度	●	●		44.2%	28.1%	31.8%	49.2%	79.7%
	1-13	速さ	●	●		46.5%	19.7%	35.6%	55.5%	81.7%
	1-14	資料の活用		●		41.0%	24.9%	30.1%	44.1%	77.8%
中学範囲 「関数」 (必答)	2-1	関数の値		●		79.2%	48.0%	73.3%	92.3%	98.3%
	2-2	反比例		●		50.3%	20.9%	31.1%	66.0%	91.9%
	2-3	1次関数(傾き)		●		60.4%	28.1%	45.9%	76.4%	94.4%
	2-4	1次関数		●		42.8%	14.4%	19.3%	60.0%	90.2%
	2-5	1次関数(変化の割合)		●		32.3%	23.7%	24.1%	32.0%	62.6%
	2-6	2点を通る直線の方程式		●		55.5%	30.9%	45.1%	63.6%	89.0%
	2-7	2次関数		●		57.7%	19.5%	43.0%	75.7%	93.4%
	2-8	2次関数(グラフ)		●		58.5%	31.7%	45.3%	71.2%	90.2%
	2-9	関数(変化の割合)		●		51.9%	31.7%	43.8%	60.5%	74.1%
	2-10	関数(変域)		●		49.6%	20.9%	36.0%	62.3%	84.4%
	2-11	応用		●		58.0%	30.7%	43.7%	70.4%	94.1%
	2-12	応用		●		30.4%	11.0%	12.9%	35.4%	82.6%
	2-13	応用		●		38.1%	18.0%	31.5%	44.3%	62.1%
中学範囲 「図形」 (必答)	3-1	図形の性質(ねじれの位置)		●		66.7%	38.9%	60.8%	77.6%	86.6%
	3-2	扇形の面積	●			62.6%	36.2%	53.1%	73.0%	90.7%
	3-3	円錐の体積		●		61.3%	40.8%	45.2%	72.7%	96.1%
	3-4	三角柱の体積		●		61.6%	33.2%	50.1%	74.1%	91.7%
	3-5	球の体積		●		37.2%	14.2%	20.9%	47.4%	78.5%
	3-6	三角形の外角		●		83.0%	49.7%	80.1%	95.3%	99.3%
	3-7	円周角の定理		●		75.0%	39.7%	70.2%	87.5%	97.3%
	3-8	相似		●		88.4%	60.3%	89.3%	97.0%	98.5%
	3-9	相似		●		35.1%	16.1%	20.4%	41.3%	77.0%
	3-10	図形(三平方の定理)		●		63.0%	23.7%	50.6%	80.8%	95.4%
	3-11	応用		●		56.7%	19.0%	39.0%	76.0%	95.8%
	3-12	応用		●		42.6%	15.9%	29.0%	50.3%	87.5%
	3-13	応用		●		32.5%	14.6%	25.1%	50.3%	59.7%

平成 28 年第 1 回数学検査 MM 校 2 年 問題内容及び正答率

単元名	問題番号	問題内容	出題範囲			県全体	D3	D1+D2	C	A+B
			小学	中学	高校					
基本問題 (必答)	1-1	四則演算		●		69.3%	35.0%	66.7%	84.7%	94.0%
	1-2	四則演算(分数)	●	●		86.0%	47.7%	88.5%	98.7%	98.5%
	1-3	四則演算(平方根)		●		79.7%	37.2%	80.0%	96.0%	100.0%
	1-4	式の計算		●		69.6%	36.2%	68.5%	82.4%	93.0%
	1-5	式の計算(分数)		●		50.9%	16.3%	42.6%	71.6%	88.6%
	1-6	1次方程式		●		70.7%	22.5%	68.0%	92.7%	97.0%
	1-7	2次方程式(因数分解)		●		52.5%	17.3%	41.6%	76.8%	93.0%
	1-8	2次方程式(解の公式)		●		58.7%	25.7%	50.9%	78.6%	94.0%
	1-9	濃度	●	●		47.2%	22.3%	38.1%	62.6%	91.5%
	1-10	関数の値		●		72.9%	24.0%	71.1%	93.9%	99.5%
	1-11	関数(変化の割合)		●		28.9%	19.2%	25.8%	32.6%	53.2%
	1-12	図形(円錐の体積)		●		38.3%	12.7%	25.2%	57.8%	92.0%
	1-13	図形(平行線の錯角・同位角)		●		88.6%	64.0%	89.3%	97.3%	99.5%
	1-14	確率		●		58.4%	33.8%	53.9%	71.6%	83.1%
数と式 (選択) 数 I	2-1	式の計算		●		59.2%	32.4%	54.6%	75.0%	88.1%
	2-2	展開		●		79.6%	40.2%	81.5%	94.7%	100.0%
	2-3	因数分解		●		79.7%	41.6%	79.7%	97.1%	100.0%
	2-4	因数分解		●		72.2%	37.1%	68.8%	91.5%	97.2%
	2-5	絶対値			●	45.1%	28.0%	41.4%	53.4%	73.9%
	2-6	平方根(展開)		●		52.1%	14.1%	39.5%	81.9%	97.7%
	2-7	平方根(分母の有理化)			●	35.0%	19.9%	18.4%	54.5%	92.0%
	2-8	1次不等式			●	62.5%	34.9%	56.3%	79.6%	96.0%
	2-9	1次不等式(分数)			●	43.9%	23.8%	35.9%	56.7%	87.5%
	2-10	連立不等式			●	18.5%	16.1%	12.6%	19.9%	53.4%
	2-11	応用			●	47.6%	13.9%	34.4%	74.5%	97.2%
	2-12	応用			●	54.9%	24.4%	47.4%	74.4%	92.6%
	2-13	応用			●	19.1%	10.2%	14.4%	21.5%	54.5%
	2次関数 (選択) 数 I	3-1	関数の式		●		46.3%	25.2%	37.6%	70.3%
3-2		関数の値			●	44.3%	13.3%	36.5%	72.8%	90.0%
3-3		グラフ			●	47.1%	22.5%	41.3%	70.0%	86.7%
3-4		平行移動			●	28.7%	17.9%	19.0%	44.1%	85.0%
3-5		頂点・軸			●	42.5%	14.7%	32.0%	72.5%	93.3%
3-6		頂点・軸			●	31.7%	17.4%	25.9%	42.2%	91.7%
3-7		最大値・最小値			●	23.0%	21.1%	24.6%	21.7%	31.7%
3-8		最大値・最小値			●	27.4%	20.6%	21.2%	36.4%	73.3%
3-9		最大値・最小値			●	42.0%	21.1%	38.0%	60.7%	73.3%
3-10		最大値・最小値			●	20.7%	14.7%	21.0%	19.8%	51.7%
3-11		頂点・軸			●	39.8%	25.2%	35.2%	52.1%	85.0%
3-12		応用			●	21.2%	17.0%	23.6%	20.8%	26.7%
3-13		応用			●	18.9%	15.6%	18.2%	19.5%	40.0%
図形と計量 (選択) 数 I		4-1	三角比の値			●	68.4%	41.3%	65.6%	81.5%
	4-2	三角比の値			●	63.9%	36.9%	56.3%	79.9%	95.7%
	4-3	三角比の値			●	32.6%	16.2%	24.6%	44.0%	77.1%
	4-4	三角比の値			●	37.4%	22.9%	31.9%	46.8%	67.1%
	4-5	相互関係			●	69.0%	41.3%	61.9%	86.4%	94.3%
	4-6	相互関係			●	58.4%	30.7%	49.9%	75.8%	95.7%
	4-7	三角比の値			●	56.1%	26.8%	45.7%	76.3%	95.7%
	4-8	正弦定理			●	37.5%	23.5%	36.3%	40.4%	67.1%
	4-9	余弦定理			●	35.4%	23.5%	28.8%	43.4%	72.9%
	4-10	三角形の面積			●	17.6%	12.8%	13.0%	22.4%	41.4%
	4-11	応用(相互関係)			●	35.4%	16.2%	28.5%	46.0%	78.6%
	4-12	応用(余弦定理)			●	32.0%	23.5%	30.2%	36.0%	42.9%
	4-13	応用(正弦定理)			●	28.9%	15.1%	27.3%	31.9%	55.7%
	場合の数 (選択) 数 A	5-1	和の法則、積の法則		●		66.8%	18.5%	56.7%	80.4%
5-2		和の法則、積の法則			●	80.4%	55.6%	71.1%	87.6%	100.0%
5-3		和の法則、積の法則			●	25.6%	16.7%	20.1%	29.6%	37.0%
5-4		順列			●	70.6%	29.6%	60.2%	79.6%	97.3%
5-5		組合せ			●	71.8%	31.5%	62.7%	80.4%	97.3%
5-6		順列			●	50.2%	24.1%	37.0%	59.6%	86.3%
5-7		順列			●	49.2%	33.3%	34.9%	55.2%	86.3%
5-8		重複順列			●	71.2%	24.1%	57.7%	85.6%	98.6%
5-9		円順列			●	46.4%	18.5%	34.5%	53.6%	84.9%
5-10		組合せ			●	62.5%	33.3%	48.6%	71.6%	95.9%
5-11		応用			●	31.6%	24.1%	18.0%	35.2%	72.6%
5-12		応用			●	31.5%	25.9%	26.1%	32.8%	46.6%
5-13		応用			●	21.0%	7.4%	13.7%	24.8%	42.5%
整数の性質 (選択) 数 A		6-1	約数と倍数			●	82.8%	13.3%	77.1%	92.5%
	6-2	約数と倍数			●	82.8%	46.7%	65.1%	96.3%	100.0%
	6-3	約数と倍数			●	50.0%	20.0%	44.6%	57.5%	56.5%
	6-4	約数と倍数			●	59.4%	26.7%	38.6%	72.5%	95.7%
	6-5	最大公約数、最小公倍数			●	30.2%	26.7%	24.1%	31.3%	43.5%
	6-6	最大公約数、最小公倍数			●	59.9%	46.7%	41.0%	72.5%	87.0%
	6-7	ユークリッドの互除法			●	41.2%	33.3%	26.5%	46.3%	65.2%
	6-8	不定方程式			●	31.3%	6.7%	22.9%	23.8%	69.6%
	6-9	循環小数			●	65.6%	20.0%	53.0%	77.5%	87.0%
	6-10	2進法→10進法			●	43.2%	13.3%	36.1%	47.5%	60.9%
	6-11	応用			●	16.1%	6.7%	19.3%	15.0%	13.0%
	6-12	応用			●	27.6%	6.7%	16.9%	28.8%	65.2%
	6-13	応用			●	29.7%	40.0%	16.9%	28.8%	65.2%

平成 28 年第 1 回数学検査 MM 校 3 年 問題内容及び正答率

単元名	問題番号	問題内容	出題範囲			県全体	D3	D1+D2	C	A+B
			小学	中学	高校					
基本問題 (必答)	1-1	四則演算		●		64.3%	46.6%	66.6%	79.5%	85.3%
	1-2	式の計算		●		83.3%	68.7%	87.9%	93.6%	96.2%
	1-3	2次方程式(因数分解)		●		57.2%	25.5%	63.0%	82.6%	93.6%
	1-4	2次方程式(解の公式)		●		48.4%	23.4%	47.7%	72.4%	87.2%
	1-5	濃度	●	●		42.2%	24.9%	42.3%	56.5%	76.9%
	1-6	2点を通る直線の方程式		●		39.1%	14.4%	32.2%	67.1%	91.0%
	1-7	図形(三平方の定理)		●		43.6%	21.1%	38.8%	67.6%	89.1%
	1-8	因数分解		●		77.8%	52.8%	85.7%	95.2%	99.4%
	1-9	1次不等式			●	41.9%	18.5%	35.4%	69.5%	85.9%
	1-10	平方根(分母の有理化)			●	54.8%	24.0%	55.2%	84.1%	96.8%
	1-11	平方根(展開)		●		59.4%	26.8%	63.4%	88.0%	96.2%
	1-12	必要・十分条件			●	33.0%	23.0%	33.7%	39.7%	56.4%
	1-13	データの分析(四分位偏差)			●	5.6%	5.6%	4.6%	5.5%	11.5%
	1-14	データの分析(相関係数)			●	39.7%	27.3%	41.9%	47.9%	62.8%
2次関数 (選択) 数 I	2-1	関数の値			●	62.0%	36.7%	63.4%	86.3%	96.4%
	2-2	平行移動			●	36.5%	17.0%	33.8%	54.8%	82.0%
	2-3	頂点・軸			●	34.3%	15.3%	26.5%	55.6%	86.5%
	2-4	グラフ			●	34.0%	20.0%	31.2%	45.2%	80.2%
	2-5	最大値・最小値			●	33.6%	20.8%	29.2%	44.0%	82.0%
	2-6	最大値・最小値			●	49.5%	35.2%	45.8%	64.9%	83.8%
	2-7	グラフとx軸の共有点			●	30.0%	19.8%	27.3%	37.6%	68.5%
	2-8	グラフとx軸の共有点			●	22.9%	12.2%	16.4%	32.6%	71.2%
	2-9	2次不等式			●	29.2%	18.2%	23.9%	39.7%	71.2%
	2-10	2次不等式			●	45.5%	35.7%	44.5%	53.7%	74.8%
	2-11	応用			●	32.7%	23.0%	30.2%	38.3%	76.6%
	2-12	応用			●	26.2%	17.3%	28.3%	29.2%	55.0%
	2-13	応用			●	27.0%	20.3%	29.1%	31.3%	37.8%
図形と計量 (選択) 数 I	3-1	三角比の値			●	72.2%	54.3%	74.5%	87.6%	92.9%
	3-2	三角比の値			●	49.3%	23.1%	44.5%	77.7%	91.2%
	3-3	三角比の値			●	45.0%	31.0%	37.6%	62.1%	88.5%
	3-4	三角比の値			●	33.4%	21.0%	29.6%	47.8%	58.4%
	3-5	相互関係			●	59.4%	40.9%	56.9%	78.5%	91.2%
	3-6	相互関係			●	29.0%	15.0%	23.9%	43.8%	69.0%
	3-7	三角比の値			●	30.1%	19.3%	25.0%	40.1%	77.9%
	3-8	正弦定理			●	27.2%	21.0%	23.9%	33.1%	56.6%
	3-9	余弦定理			●	17.7%	13.8%	16.9%	19.3%	38.9%
	3-10	三角形の面積			●	30.5%	23.7%	29.7%	33.1%	65.5%
	3-11	応用(余弦定理)			●	21.6%	18.5%	18.9%	22.7%	53.1%
	3-12	応用(正弦定理)			●	39.9%	29.1%	42.2%	45.3%	67.3%
	3-13	応用			●	33.6%	24.6%	35.4%	38.8%	52.2%
場合の数と確率 (選択) 数A	4-1	和の法則、積の法則		●		28.9%	23.7%	28.6%	34.4%	65.6%
	4-2	順列			●	46.7%	32.5%	49.7%	62.3%	81.3%
	4-3	重複順列			●	52.8%	44.9%	57.8%	56.1%	68.8%
	4-4	円順列			●	38.5%	28.9%	36.4%	54.5%	78.1%
	4-5	組合せ			●	24.4%	18.3%	20.6%	35.7%	71.9%
	4-6	確率			●	23.9%	15.8%	24.9%	34.4%	53.1%
	4-7	確率			●	25.8%	21.9%	22.6%	32.0%	78.1%
	4-8	余事象の確率			●	19.2%	12.9%	18.3%	27.0%	62.5%
	4-9	独立試行の確率			●	37.9%	26.6%	38.2%	52.0%	84.4%
	4-10	反復試行の確率			●	23.6%	22.6%	24.6%	22.1%	40.6%
	4-11	応用			●	26.2%	12.0%	24.9%	45.5%	87.5%
	4-12	応用			●	27.1%	19.9%	25.6%	37.7%	68.8%
	4-13	応用			●	12.2%	9.5%	11.1%	13.9%	50.0%
図形と方程式 (選択) 数 II	5-1	2点間の距離			●	52.0%	40.0%	36.1%	54.5%	82.6%
	5-2	内分点の座標			●	36.2%	20.0%	25.0%	39.4%	69.6%
	5-3	三角形の重心の座標			●	52.8%	25.0%	36.1%	69.7%	95.7%
	5-4	2点を通る直線の方程式			●	48.8%	27.5%	22.2%	69.7%	91.3%
	5-5	2直線の関係(平行)			●	48.0%	20.0%	36.1%	66.7%	87.0%
	5-6	2直線の関係(垂直)			●	29.9%	20.0%	16.7%	27.3%	65.2%
	5-7	点と直線の距離			●	17.3%	22.5%	16.7%	15.2%	17.4%
	5-8	円の方程式			●	44.1%	15.0%	44.4%	57.6%	69.6%
	5-9	直線と円の共有点			●	36.2%	20.0%	41.7%	33.3%	56.5%
	5-10	円の接線の方程式			●	36.2%	15.0%	22.2%	54.5%	65.2%
	5-11	応用(不等式の表す領域)			●	34.7%	22.5%	27.8%	27.3%	73.9%
	5-12	応用(2直線の交点)			●	35.4%	20.0%	16.7%	39.4%	78.3%
	5-13	応用			●	39.4%	27.5%	38.9%	36.4%	56.5%
微分法 (選択) 数 II	6-1	平均変化率			●	68.5%	14.3%	73.5%	68.2%	82.4%
	6-2	極限值			●	65.7%	50.0%	50.0%	66.7%	82.4%
	6-3	微分			●	83.2%	14.3%	67.6%	95.5%	97.1%
	6-4	微分係数			●	74.1%	42.9%	64.7%	77.3%	82.4%
	6-5	接線の傾き			●	35.0%	14.3%	23.5%	34.8%	55.9%
	6-6	接線の方程式			●	27.3%	14.3%	20.6%	22.7%	47.1%
	6-7	関数の増減			●	49.0%	35.7%	35.3%	50.0%	67.6%
	6-8	極値			●	37.8%	14.3%	20.6%	33.3%	70.6%
	6-9	極値			●	42.0%	21.4%	38.2%	31.8%	67.6%
	6-10	極値			●	49.0%	42.9%	32.4%	45.5%	73.5%
	6-11	応用(極値)			●	52.4%	42.9%	29.4%	48.5%	79.4%
	6-12	応用			●	27.3%	14.3%	17.6%	21.2%	50.0%
	6-13	応用			●	29.4%	21.4%	14.7%	25.8%	52.9%